

ABSTRACT

Systems and methods for packing Steiner trees are described. In one aspect, a set of Steiner trees and paths are generated from an undirected graph of vertices representing terminal and Steiner nodes. The Steiner trees and the paths are merged to produce linked and edge disjoint S-Steiner trees. If a subset S of the vertices is edge connected, then at minimum there are substantially $\alpha_{|S|}k$ edge-disjoint Steiner trees for S , wherein α_s is a sequence that tends to an asymptotic approximation factor of $|S|/4$ as S tends to infinity.